

Design Build Contracting at WSDOT

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What is Design Build Contracting?

A method of project delivery in which the owner executes a single contract with one entity (the Design-Builder) for design and construction services to provide a finished product.

WSDOT prepares the basic project design and defines design, construction, and environmental standards that must be met by the design-build team

vs

Design Bid Build - traditional approach for delivery of transportation projects where the owner completes the design and accepts the lowest responsive bid for construction from qualified contractors.

Design Build Legislation History

- 1998 Washington State Legislature Authorizes WSDOT to Complete Pilot Project to test Design Build contracting – SSB 6439
- 2001 Washington State Legislature Authorizes Design Build Contracting for use on Transportation Projects over \$10 million (expires April 30 2008) – SHB 1680
- 2006 Washington State Legislature Authorizes WSDOT to pilot up to five projects between \$2 - \$10 million – HB 2874
- 2007 Washington State Legislature deletes expiration date from RCW 47.20.780 – SB 5798

Washington State Law Related to Design Build

RCW 47:20.780 and 47.20.785 provide guidance for Design Build Contracting

Project Criteria:

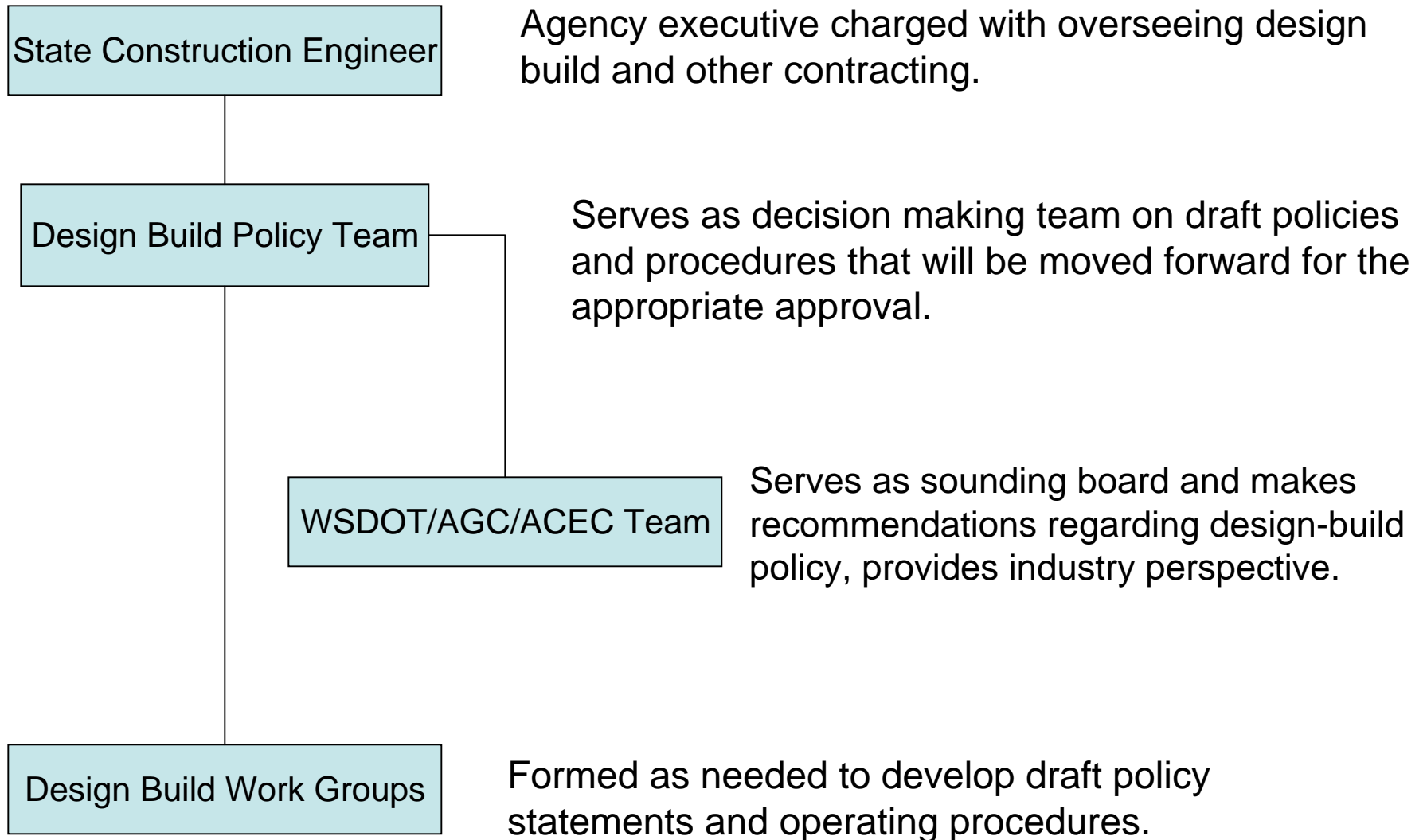
Cost must be greater than ten million dollars and:

- The construction activities are highly specialized; or
 - The projects selected provide opportunity for greater innovation and efficiencies;
- or
- Significant savings in project delivery time would be realized.

Design Build Considerations

- Additional risk assigned to contractor.
- Allows construction to start without final design of all elements.
- Generally leads to earlier completion.
- Takes fewer owner staff.
- Can lead to earlier cost certainty.
- Design is tailored to contractors means and methods.
- Plan errors and omissions are not the owner's responsibility.
- Preparation of proposals is costly.
- Risk assignment reflected in price.
- Requires full funding.
- Requires additional management.
- Changes after award are difficult.
- Procurement method is more complex.
- Stipends are provided to unsuccessful teams.
- Not for every project.

WSDOT Design Build Policy Management

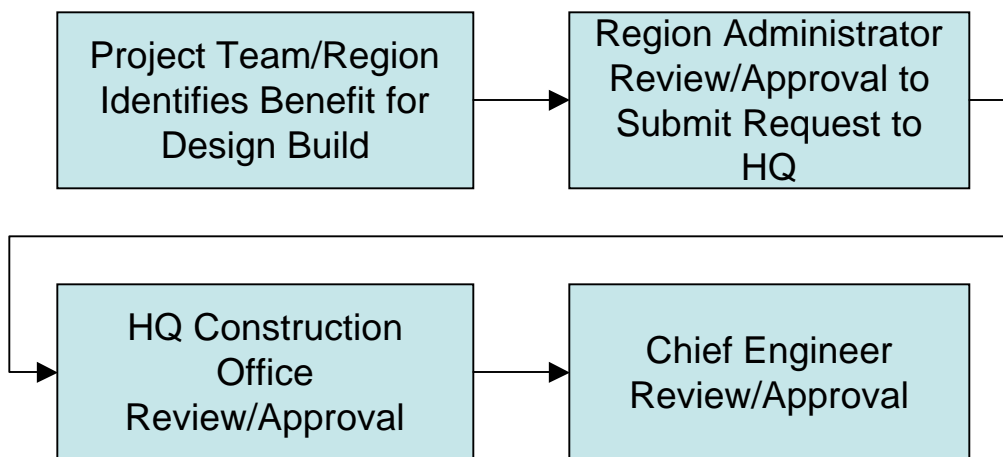


How Are Design Build Decisions Made?

The following questions need to be answered prior to gaining approval to use design build:

- Is funding available to support the proposed schedule?
- What is the organizational structure that will be put in place to manage the contract?
- What are the benefits to using design build on the project?
- What are the project risks and how will they be assigned (contractor/WSDOT)?
- A Cost Risk Assessment or a Cost Estimate Validation Process must be completed.

Approval Process Summary



At any point during the review/approval process the request could be denied or additional information requested. Other organizations may be consulted during review.

Procurement Process

- Request for Qualifications
 - Design Build Teams submit Statements of Qualifications (SOQ's) (4 weeks)
 - WSDOT Evaluates SOQ's and ranks based on predetermined scoring approach (4 weeks)
- Short listed teams notified
- Request for Proposals
 - Short listed teams prepare proposals (8 – 16 weeks)
 - WSDOT Evaluates proposals based on predetermined scoring approach (4 Weeks)
- Best Value Selection =
$$\frac{\text{Technical Evaluation Score} \times 1,000,000}{\text{Price}}$$

Advertising A Design Build Contract

The following are needed:

- Environmental processes complete
 - Environmental Impact Statement and Environmental Assessment
- Major permits.
- Right of Way acquired.
- Preliminary design or conceptual design complete.
- Base data such as subsurface soils conditions and existing utilities.
- Agreements with outside partners.
- Funding must be secured.
- Clear goals for project outcome.

Completed Contracts

- SR 500 Thurston Way Interchange (Pilot project to test Design Build)
- SR 16 Tacoma Narrows Bridge
- I-405 Kirkland Nickel Stage 1 (NE 85th to NE 124th)



SR 500



I-405



SR 16

Contracts Currently Underway

- I-5 Everett SR 526 to US 2 HOV Lanes – Anticipated Completion Summer 2008
- I-405 South Bellevue Widening – Anticipated Completion 2009
- I-405 I-5 to SR 169 Stage 1 – Anticipated Completion 2010



I-5



I-405
Bellevue



I-405
Renton

Planned Contracts

- SR 519 – Planned Ad Summer – Planned Ad 2008
- I-405 I-5 to SR 169 Stage 2 – Planned Ad Summer 2008
- I-405 NE 8th Street to SR 520 – Planned Ad Fall 2008



Planned Contracts

- I-405 SR 520 to I-5 Widening Project – Planned Ad Summer 2009
- SR 532 Safety Improvements and Congestion Relief – Planned Ad Fall 2008
- SR 520 Bridge Replacement and HOV (Select segments may be design build)



SR 532



SR 520

Results of Design Build Contracting

- Projects are of equal quality.
- Projects are delivered on schedule.
- Staffing benefits are realized.
- Industry accepts design build as an additional tool for delivery.
- High quality teams competing for projects.
- Lessons learned:
 - Requires additional management.
 - Increased resources are needed at startup.
 - Contract closure process needs to start at beginning of project.
- Cost growth during delivery is less than traditional contracts (based on the small number of contracts completed or underway).

Future of Design Build at WSDOT

- WSDOT will continue to use Design Build Contracting on appropriate projects.
- Design Build methods are not a replacement for Design – Bid – Build, but an additional tool to assist the department in delivery.
- Continue to develop boilerplate contract documents.
- Research methods to shorten procurement timing.

For more information on Design Build Contracting
at WSDOT, please contact:

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